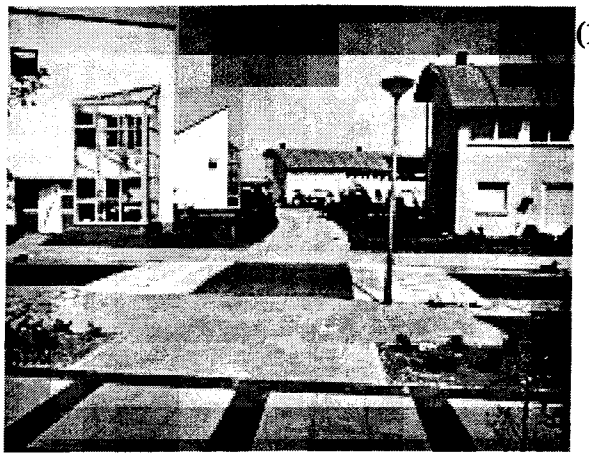
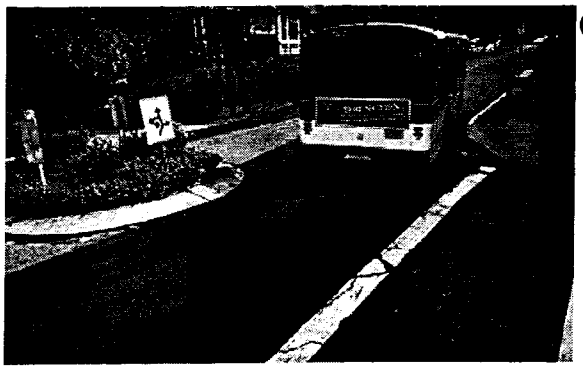


(1)

Example Solutions

Solutions requested by residents will slow traffic to safer speeds, reduce the desire to cut through the neighborhood, improve pedestrian crossings, and add beauty and value to area properties. The net effect of these changes can lead to sustained or enhanced property values, improved access for pedestrians and bicyclists and less dependency on auto trips.

(2)



(3)

(4)

(1) Shown here (right) is an example of a speed table (flat top table) that can be used on Ahe and at the school.. This tool slows motorists to about 12-15 mph at the most critical point, and acts as a speed reducer for overly long roadways.

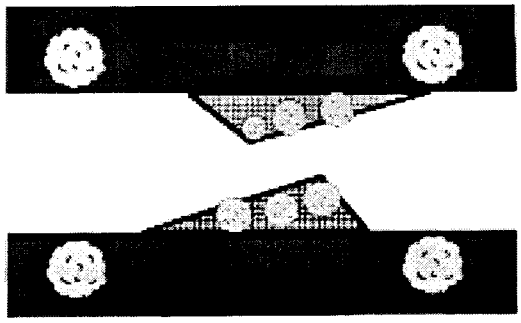
(2) A neckdown causes an entering motorist to wait for an exiting motorist. Such a tool works if traffic volumes are moderate, such as on 10th or Palolo. The cut-through driver knows that they might be slowed significantly by such delays. Such restraints, however, impact people living in the neighborhood more than any other group.

(3) The mini-circle or roundabout is an effective tool where poor sight distances, speeding and cut-through traffic are evident. An inspection must be made to see if mini-circles will fit well into the neighborhood. Curbing is needed at mini-circle locations.

(4) Medians, especially on curves, slow traffic to appropriate speeds. A new traffic calming tool is needed each 400-700 feet on long sections of roadway, such as Kiwila or the spine roads. Medians are most strategic when placed on curves.

(5) Angled Slow Points slow down motorists in mid-block locations. These tools can all be applied in different parts of the same neighborhood. Curbing is needed with each treatments.

(5) Angled Slow Point



The residents' prioritize the problems they felt needed to be addressed and then designed solutions for those problems by drawing possible traffic calming devices on a neibhorhood map. The Traffic Calming Team compiled the resident's suggestions and tested their engineering feasibility to develop a set of 14 recomendations for Pearl City.

Engineering Analysis

Michael Wallwork, P.E. has drawn conceptual plans to address traffic volume, speed, pedestrian, motorist and bicycle safety and noise reduction (see previous section). The specific treatments are described in the following numbered section. A map is provided showing approximate locations of the measures. In general, for maximum effectiveness, measures are introduced each 400-700 feet. Residents are cautioned that traffic calming has reduced or no effects if some measures are left out.

Recommendations:

1. Gateway with raised median at Kuahaka Street and Waimano Home Road.
2. Angled slow point on Kuahaka Street 580 feet from Waimano Home Road.
3. Roundabout at Kalauipo Street and Kuahaka Street.
4. Angled slow point on Kuahaka Street between Kalauipo and Paakamaa Streets.
5. Center median and curb extensions at Kuahaka and Paakamaa Streets.
6. Raised, landscaped median and parking lane on Kuahaka Street between Paakamaa and Leomele Streets.
7. Center median and curb extensions at Kuahaka and Leomele Street.
8. Speed table at Kumano Street and Kuahaka Street.
9. Angled slow point on Kuahaka Street between Kumano and Paakamaa Streets.
10. Roundabout at Kaweloka Street and Kuahaka Street.
11. Bulbouts on Kaweloka Street at Kaumahana Place.
12. Complete sidewalk connections on Kuahaka.
13. Install street trees throughout study area where needed.
14. Install curb ramps where sidewalk meets curb throughout study area.

Step 5-- Neighborhood Charrette

An evening charrette was held on April 15, 1998 between 6:00 and 9:00 pm. Twenty-six residents attended a charrette to learn the process, tools and applications of traffic calming. Following a 40 minute presentation on traffic calming tools by Dan Burden, residents were asked to "Identify the Big Problems".

The identified problems are listed in priority.

- Speeding on Kuahaka because it is too wide, 40 foot wide and sloping
- Waimano Home Road/ Kuahaka: difficult to exit onto Maimano Home road during heavy traffic
- Kaweloka & Kuahaka intersection: difficult to enter intersection due to speeding on Kuahaka
- People park on walkway areas due to speeding on Kuahaka which forces pedestrians to walk in street to get around vehicles
- Many intersection crosswalks lack ramps for wheelchairs
- Drivers are cutting around buses on Kuahaka
- Ugly streets for pedestrians to walk on. Needs trees.
- Leomele and Kuahaka, parking around corners during park devents restricts visibility
- Streets are too wide
- Lack of sidewalks
- Speeding from H-1 to Kamehameha Highway via Puukula drive in both directions

Charrette Agenda

I	Introduction
II	Presentation
III	What are the Tools?
IV	Brainstorming the Big Problems
V	Voting on Priorities
VI	Design Tables
VII	Group Reports
VIII	Closing -- Where Do We Go From Here?

A table design session followed. Residents worked in small groups around a table and map and identified the following action items. The residents' suggestions were handed over to the traffic calming engineers to determine the most effective treatment for each problem location.

- ☑ Kuahaka at Kaweloka: Roundabout with crosswalks
- ☑ Crosswalk on Kumano at Manana elementary School
- ☑ Speed humps or traffic circles at intervals along Kuahaka
- ☑ advance rumble strips to warn drivers to slow down prior to speed humps or roundabouts
- ☑ Raised median on Kuahaka
- ☑ Traffic circles at Kalauipo, Leomele, Palamoi and Paakamaa intersections
- ☑ Tall trees along Kuahaka
- ☑ Bulb-outs at Kalauipo, Paakamaa, and Kumano intersections
- ☑ Safer exit from Kaumahana
- ☑ Move bus stop on Kuahaka near Palamoi
- ☑ Intersection table on Kuahaka at Paakamaa and at Kuman

#7 Center median and curb extensions on Kuahaka at Leomele

#6 Raised median and parking lane on Kuahaka

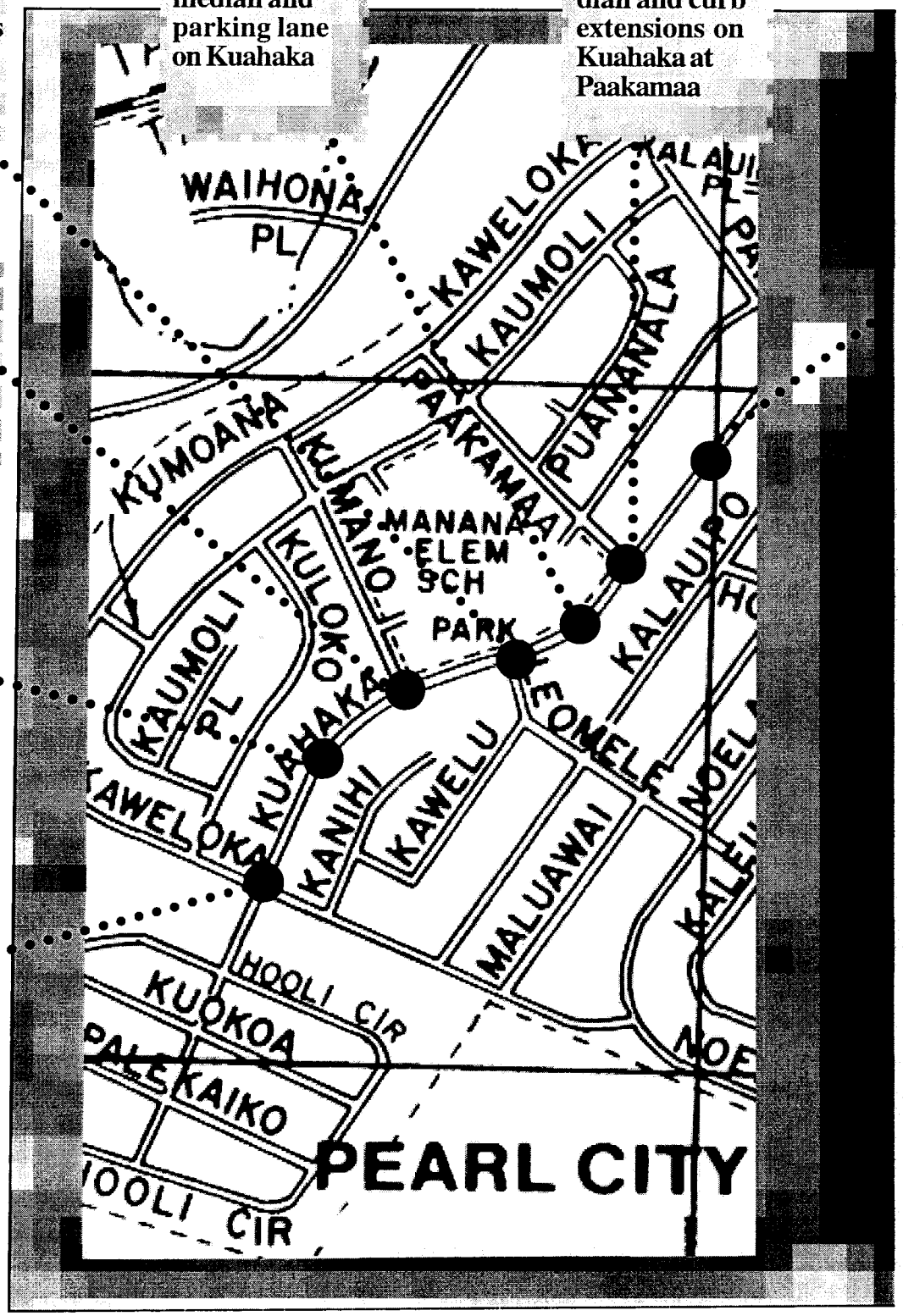
5 Center median and curb extensions on Kuahaka at Paakamaa

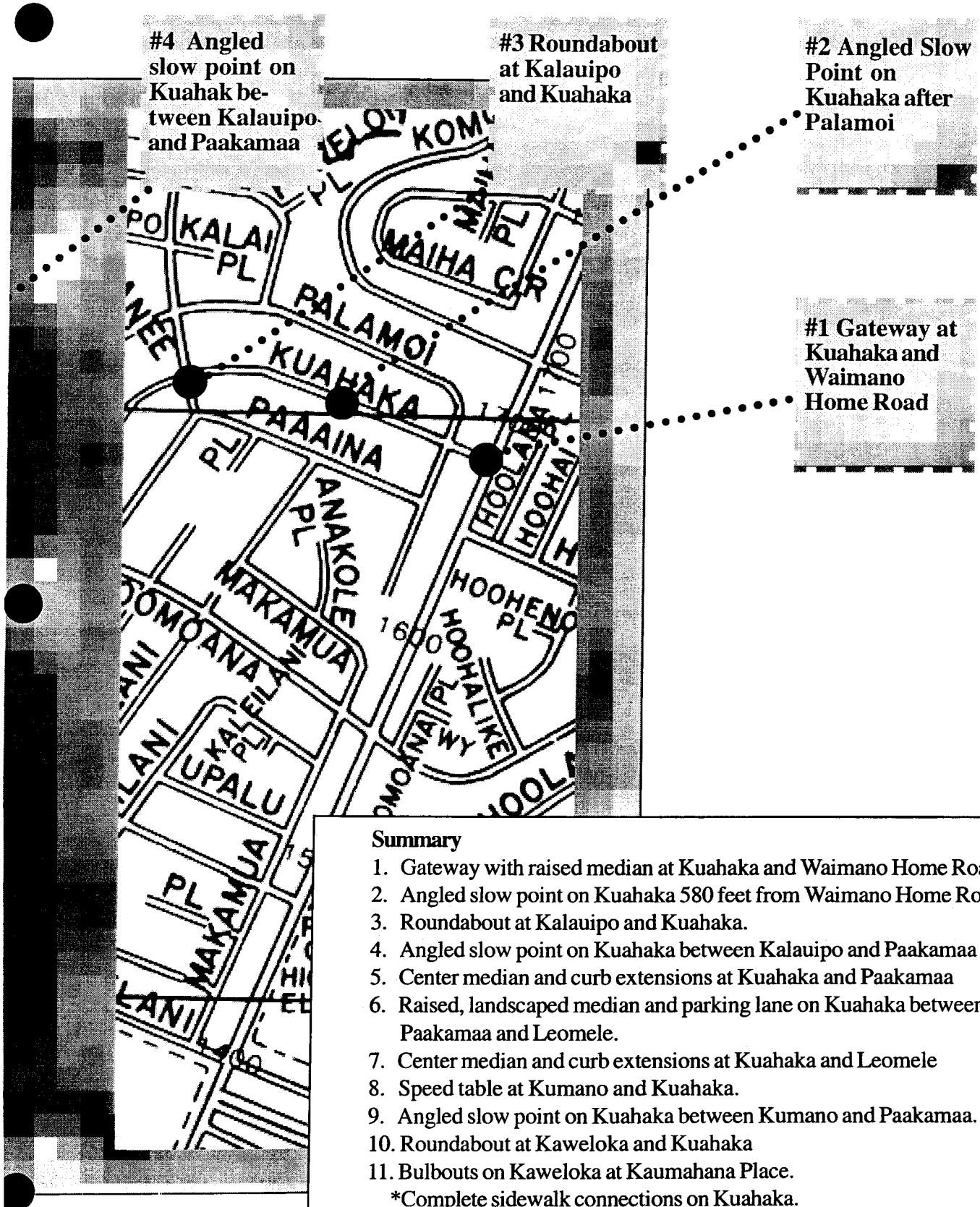
#8 Speed Table at Kumano and Kuahaka

#9 Angled slow point on Kuahaka between Kumano and Kaweloka

#10 Roundabout at Kaweloka and Kuahaka

#11 Bulbouts on Kaweloka at Kaumahana Place





Summary

1. Gateway with raised median at Kuahaka and Waimano Home Road.
2. Angled slow point on Kuahaka 580 feet from Waimano Home Road.
3. Roundabout at Kalauipo and Kuahaka.
4. Angled slow point on Kuahaka between Kalauipo and Paakamaa
5. Center median and curb extensions at Kuahaka and Paakamaa
6. Raised, landscaped median and parking lane on Kuahaka between Paakamaa and Leomele.
7. Center median and curb extensions at Kuahaka and Leomele
8. Speed table at Kumano and Kuahaka.
9. Angled slow point on Kuahaka between Kumano and Paakamaa.
10. Roundabout at Kaweloka and Kuahaka
11. Bulbouts on Kaweloka at Kaumahana Place.

*Complete sidewalk connections on Kuahaka.

* Street trees throughout study area where needed.

*Curb ramps where sidewalk meets curb throughout study area.